

18. EXTENTION OF RANGE OF THE NARROW-MOUTH FROG,
UPERODON GLOBULOSUM (GUNTHER) TO KAMRUP DISTRICT,
ASSAM

The narrow-mouth frog, *Uperodon globulosum* (Günther), is believed to be a rare species from its small numerical records from the reported areas, although it enjoys a wide range of distribution. The species has been obtained from West Bengal, Bihar, Madhya Pradesh and Maharashtra. Orissa has also been included in the range of distribution of this species (Boulenger 1890) but no specimen from that state could be traced. In West Bengal, this species has been collected from the Botanical Gardens, Shibpur, Howrah District in 1880's; from Khardah, 24 Parganas District in 1928, from Jalpaiguri District in 1956, and recently from Barakpur and Baj Baj, 24 Parganas District.

In their note on its record from Jalpaiguri, West Bengal, Bhaduri and Basu (1956) wrote: "The presence of *U. globulosum* in Jalpaiguri in northern Bengal particularly as it is situated in the borderline of Assam, seems to be an interesting feature. Its occurrence, therefore, in some parts of Assam may not be unlikely from the point of view of its distribution". This remark has now been fully borne out by a recent finding of an example of this species from a termitarium in Mothanguri, Manas Sanctuary, Kamrup District, Assam, by one of us (S.S.S.), who brought a live specimen to Calcutta.

The alleged rarity of the species is probably because it eludes collectors from its subterranean habits. There remains much to be learnt about the biology of this narrow-mouth frog. On earlier occasions the frog was exhumed from termitarium or from fields, usually from among debris. Abdulali & Daniel (1954) found it in fair numbers in the Salsette Island, Bombay, when the frogs came out of their

burrow habitats for breeding. The present collection was from a forested area, in the semi-open mixed forest tract of Manas Sanctuary, in a block where the soil was damp and the forest floor was littered with piles of decaying logs, mostly infested with termites. The narrow-mouth frog was located underneath a decaying log and partly embedded in soft clay. The soil termite, *Speculitermes* sp., was found in association with this frog. This termite does not make exposed mounds but forms a system of tunnels in the clay as well as in the decaying logs lying on the ground. The frog was found buried in the soft clay, head and part of its upper back out of soil but under a decaying log, hollowed out just over the frogs body. Termites were apparently undisturbed by the presence of the frog. However, it is presumed that those termites constitute the chief food of the frog. The live specimen was brought back to Calcutta. No attempt was made to feed this animal and it died after 14 days of starvation. It may be recalled in this connection that Mukerji (1933) observed this species died after 31 days of starvation.

Material: 1 ♀, collected on 14 June 1975 by Shri S. S. Saha from Mothanguri, Manas Sanctuary, Kamrup District, Assam, and deposited in the National Zoological Collections, Zoological Survey of India, Calcutta.

The present finding, extending the range of distribution of *Uperodon globulosum* (Günther) to Assam, has significant bearing on the zoogeography of the species. Discoveries from further eastern part of its known range, particularly from the Indo-Malayan subregion may, perhaps, throw some light on the affinity of the species.

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19. OCCURRENCE OF *BOTIA LOHACHATA* CHAUDHURI IN HIMACHAL PRADESH WITH REMARKS ON THE TAXONOMY OF INDIAN SPECIES OF *BOTIA* GRAY (PISCES: COBITIDAE)

Recently, I came across in the fish collection of this Station 3 specimens of *Botia lohachata* Chaudhuri collected from Nakeri Khud, 10 kms from Dehragopipur, Distt. Kangra (H.P.). These specimens, labelled as *Botia dayi* Hora, agree well with the account of *B. lohachata* as given by Chaudhuri (1912). Since *B. lohachata* is hitherto known from Bihar, Uttar-Pradesh, Rajasthan (Udaipur), Delhi, Punjab and Sind (Menon 1974), the present find extends its distributional range to Himachal Pradesh, as may be expected from the zoogeographical point of view (Menon 1962).

Tilak and Hussain (1977) in their checklist of the fishes of Himachal Pradesh included two species of *Botia*, *B. birdi* Chaudhuri and *B. dayi* Hora, the latter species recorded for the first time from Himachal Pradesh. Hi-

therto, *B. dayi* was known from Eastern Himalayas (Menon 1974) and from the western ghats (Rao and Yazdani. 1978).¹

Day (1878-1889) referred to 6 species of *Botia*, namely, *B. nebulosa* Blyth, *B. dario* (Ham.), *B. geto* (Ham.), *B. almorhae* Gray, *B. bermorei* Blyth, and *B. histrionica* Blyth. As Day's (op. cit.) key to the species of *Botia*, based mainly on the differences in the fin-ray counts and number of barbels, was not helpful Hora (1922) analysed *Botia* spp. on the basis of other characters such as size and position of eyes and length of snout in relation to head. He (op. cit.) dealt with altogether 17 species, 8 of which, namely, *B. almorhae*, *B. birdi*, *B. dario*, *B. geto*, *B. histrionica*, *B. lohachata*, *B. rostrata*, and *B. striata* were considered valid from India. He (op. cit.) synonymised *B. bermorei* (having 6 barbels) with *B. hymenophysa* (Bleeker)—a species (having 8 barbels) known from Burma, Thailand, Indo-Australian Archipelago and re-

¹ See vol. 76 (3): 525-527, for the validity of this record—Eds.